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10/614,292	07/08/2003	Steven Hartman	14391	7384

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EXAMINER

EASHOO, MARK

ART UNIT PAPER NUMBER

1732

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/614,292

Applicant(s)

HARTMAN, STEVEN

Examiner

Mark Eashoo, Ph.D.

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-16 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Election/Restrictions*

This application contains claims 9-16 drawn to an invention nonelected with traverse in the reply filed on 03-NOV-2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claim 2 recites that that the foamed material is held rotationally stationary relative to the environment but does not describe this feature in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

### *Claim Rejections - 35 USC § 102/103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Knaus (US Pat. 4,919,864).

Regarding claim 1: Knaus teaches the claimed process of forming an extruded foam article comprising: extruding a first foam material through an extrusion channel wherein the first foam material has an outer surface within the extrusion channel (Figs. 1-3); and applying a visible first coating onto the outer surface of the first foam material wherein the coating only occupies a fraction of the perimeter of the outer surface (Figs. 1, 3, 4 and element 82). Knaus teaches many resinous materials are applicable for use in his process,

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including polymer blends which are at least to some degree compatible with the homopolymers that makeup the blend material (3:1-40).

Knaus further teaches that secondary flow “can” (6:10-15) or “may” (6:25-35) contain a blowing agent and therefore suggests that the blowing agent is not essential to the secondary flow. Knaus also recites that the embodiment directed to the use of two foamed materials is “a non-limiting example” (6:55-60). Furthermore, Knaus specifically teaches that the density of the secondary flow “may be of different density” (6:25-35 and 7:5-15). Accordingly, in view of the above teachings, it is submitted that the broadest reasonable interpretation of Knaus is inclusive of a non-foamed secondary material or outer surface coating.

### ***Claim Rejections - 35 USC §103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knaus (US Pat. 4,919,864) in view of Johnson (US Pat. 2,191,829).

Knaus teaches the basic claimed process of forming an extruded foam article as set forth above regarding claim 1.

Regarding claim 2: Knaus does not teach rotating an applicator/die portion to form a helical band, but does that the colored material may have a multitude of patterns (2:35-40). Nonetheless, Johnson teaches forming a helical band on an extrudate by rotating an applicator/die portion (Figs. 4-6 and 2:1-55). It is noted that the rotation of die portion is parallel to the axis of extrusion. Knaus and Johnson are combinable because they are from the same field of endeavor, namely, coextrusion and the forming of a striped extrudate. At the time of invention a person of ordinary skill in the art would have found it obvious to have formed a helical band on an extrudate by rotating an applicator/die portion, as taught by Johnson, in the process of Knaus, and would have been motivated to do so because Johnson suggests that such helical bands provide desirable ornamentation to the extrudate.

Regarding claims 3-4: Knaus does not teach an applicator/die portion forming part of the extrusion channel and having a plurality of spaced flows. Nonetheless, Johnson teaches an applicator/die portion forming part of the extrusion channel and having a plurality of spaced flows (Figs. 4-6 and 2:1-55). At the time of invention a person of ordinary skill in the art would have found it obvious to have used an applicator/die portion forming part of the extrusion channel and having a plurality of spaced flows, as taught by Johnson, in the process of Knaus, and would have been motivated to do so because Johnson suggests that such applicator/die portion is an equivalent means to provide material flows streams to from stripes on an extrudate.

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Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knaus (US Pat. 4,919,864) in view of Johnson (US Pat. 2,191,829) as applied to claims 2-4 above, and further in view of Puchert (CH 675982 A5).

Regarding claim 5: Knaus teaches the basic claimed process as set forth above. Knaus does not teach an applicator/die portion for forming multiple helical colored bands, but does teach that the colored material may have a multitude of patterns (2:35-40). Nonetheless, Puchert teaches an applicator/die portion for forming multiple helical colored bands (Figs. 1, 2, and 7). Knaus and Puchert are combinable because they are from the same field of endeavor, namely, coextrusion and the forming of a striped extrudate. At the time of invention a person of ordinary skill in the art would have found it obvious to have formed multiple colored helical bands on an extrudate by rotating an applicator/die portion, as taught by Puchert, in the process of Knaus, and would have been motivated to do so because Johnson suggests that such helical bands provide desirable ornamentation to the extrudate.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knaus (US Pat. 4,919,864).

Knaus teaches the basic claimed process of forming an extruded foam article comprising: extruding a first foam material through an extrusion channel wherein the first foam material has an outer surface within the extrusion channel (Figs. 1-3); and applying a visible first coating onto the outer surface of the first foam material wherein the coating only occupies a fraction of the perimeter of the outer surface (Figs. 1, 3, 4 and element 82).

Regarding claims 7-8: Knaus further teaches expanding the first foamable thermoplastic material and coating to about 4 times (2:4-34 and 5:29-42).

Knaus does not teach expanding the foamable thermoplastic material by a factor of 10-50 times. Nonetheless, expansion ratios of foamable thermoplastics on the order of 10-50 times are well known in the molding art and are dependent upon the amount of blowing agent used and the foam cell size desired. At the time of invention a person of ordinary skill in the art would have found it obvious to have expanded a foamable thermoplastic material by a factor of 10-50 times, as commonly practiced in the art, in the process of Knaus, and would have been motivated to do so in order to form a desirable light weight foamed extrudate.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, because they all substantially teach that it is old in the art to apply co-extrude a non-foamed coating with a foamed substrate. See attached form PTO-892.

### ***Response to Arguments***

Applicant's arguments filed on 24-JUL-2006 have been fully considered but they are not persuasive, because:

A.) Applicant's remarks regarding the term "compatible" (ie. requiring different materials) is overly narrow based upon the fact that the instant specification does not set forth such a definition. Rather, the broadest reasonable interpretation of the term "compatible" is inclusive of the same material, which is effectively inherently compatible, as well as other materials which are only partially compatible.

B.) Applicant's argument that the applied references do not teach a non-foamed coating has been substantially responded to in the above rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Mark Eashoo, Ph.D.  
Primary Examiner  
Art Unit 1732

10/08/06

October 10, 2006  
me